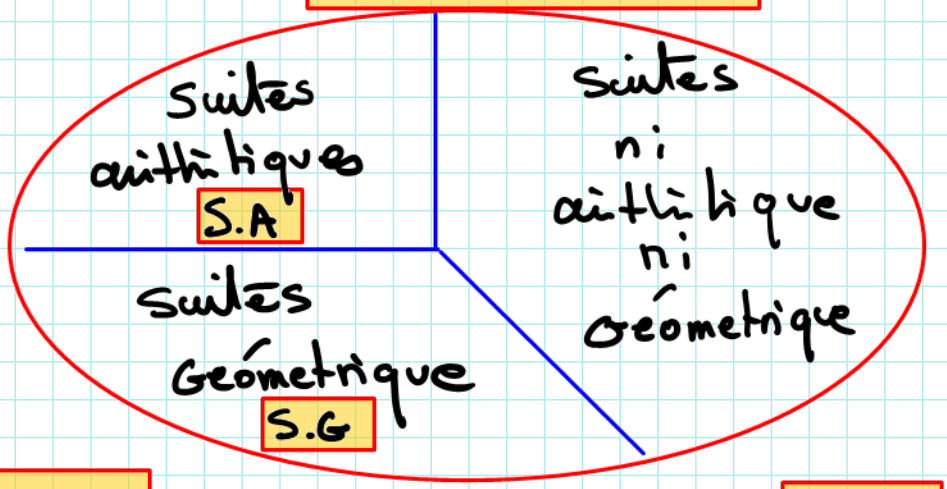
Suites Réelles



S.A

Mq (V_n) est une S.A

R

- $V_{n+1} = \ldots$ (simplification)
- $V_{n+1} - V_n = \ldots = C^{te} = r$ (raison)

Exemple : $\begin{cases} U_0 = 3 \\ U_{n+1} = 3 - \dfrac{4}{1+U_n} \end{cases}$

et $V_n = \dfrac{1+U_n}{-1+U_n}$

- Mq (V_n) est un S.A.
- R

$$V_{n+1} = \frac{1+U_{n+1}}{-1+U_{n+1}} = \frac{1+3-\frac{4}{1+U_n}}{-1+3-\frac{4}{1+U_n}}$$

S.G

Mq (V_n) est une S.G.

R

- $V_{n+1} = \ldots = C^{te}.V_n = q.V_n$ → (raison)

Exemple : $\begin{cases} U_0 = 1 \\ U_{n+1} = \dfrac{4U_n}{1+U_n} \end{cases}$

et $V_n = \dfrac{U_n - 3}{U_n}$

- Mq (V_n) est S.G.
- R

$$V_{n+1} = \frac{U_{n+1}-3}{U_{n+1}} = \frac{\frac{4U_n}{1+U_n}-3}{\frac{4U_n}{1+U_n}} \times \frac{1+U_n}{1+U_n} = \frac{4U_n-3-3U_n}{4U_n}$$